



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0472; Directorate Identifier 2013-SW-040-AD]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A Helicopters (Type Certificate Currently Held by AgustaWestland S.p.A.) (Agusta)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Agusta Model A109E, A109K2, A119, and AW119 MKII helicopters. This proposed AD was prompted by a report of a crack that was found on a Gleason crown. This proposed AD would require repetitively performing a magnetic particle inspection of the Gleason crown for a crack. We are proposing this AD to detect a crack, which could cause damage to or loss of the main rotor drive and subsequent loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39- 0331-664757; fax 39-0331-664680; or at <http://www.agustawestland.com/technical-bullettins>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Aviation Safety Agency (EASA) AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0472; Directorate Identifier 2013-SW-040-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2013-0118, dated June 3, 2013, to correct an unsafe condition for Agusta Model A109K2, A109E, A119, and AW119MKII helicopters. EASA advises that during an overhaul of an A119 main transmission, part number (P/N) 109-0400-05-103, a crack on the Gleason crown, P/N 109-0403-07-103, was found. EASA further states that an investigation by Agusta revealed that the crack originated from the bottom of one of the 40 threaded holes in the Gleason crown, and that this part-numbered Gleason crown is also installed on Model A109 helicopters. EASA states that this condition, if not corrected, could cause damage to or loss of the main rotor drive and

loss of control of the helicopter. To correct this unsafe condition, EASA AD No. 2013-0118 requires repetitive magnetic particle inspections of the Gleason crown and, if there is a crack, replacing the Gleason crown with a different part-numbered Gleason crown. EASA AD No. 2013-0118 also prohibits installing a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109, on any helicopter, as Gleason crown, P/N 109-0403-07-103, is a component of these assemblies.

Relevant Service Information

We reviewed Agusta Bollettino Tecnico (BT) No. 109EP-128 for Model A109E helicopters, Agusta BT No. 109K-57 for Model A109K2 helicopters, and Agusta BT No. 119-058 for Model A119 and AW119MKII helicopters, each Revision A and dated May 28, 2013. Each BT describes procedures for performing a magnetic particle inspection on the Gleason crown, P/N 109-0403-07-103, for a crack. If there is a crack, each BT specifies replacing the Gleason crown assembly with a Gleason crown assembly, P/N 109-0401-27-107.

We also reviewed Agusta BT No. 109EP-126 for Model A109E helicopters, Agusta BT No. 109K-56 for Model A109K2 helicopters, and Agusta BT No. 119-053 for Model A119 and AW119MKII helicopters, each dated December 20, 2012. These BTs contain procedures for upgrading the transmission system by replacing the Gleason crown assembly with a Gleason crown assembly, P/N 109-0401-27-107.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would require, for helicopters with a main transmission, P/N 109-0400-03-109, with 2,400 or more hours time-in-service (TIS), performing a magnetic particle inspection of the Gleason crown, P/N 109-0403-07-103, within 200 hours TIS, and thereafter at intervals not exceeding 1,600 hours TIS. If there is a crack, this proposed AD would require replacing the Gleason crown assembly with a different part-numbered assembly before further flight. The proposed AD would also prohibit installing on any helicopter a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109.

Differences Between This Proposed AD and the EASA AD

This proposed AD requires compliance within 200 hours TIS for main transmissions with 2,400 or more hours. The EASA AD requires different compliance times, depending on the number of flight hours the transmission has accumulated.

Costs of Compliance

We estimate that this proposed AD affects 218 helicopters of U.S. registry. We estimate the following costs to comply with this proposed AD. At an average labor rate of \$85 per hour, magnetic particle inspecting the Gleason crown would require about 24 work-hours, for an estimated cost per helicopter of \$2,040, and a total cost of \$444,720 for the U.S. fleet, per inspection cycle.

If required, replacing the Gleason crown assembly would require about 24 work-hours, and required parts would cost \$29,000, for a cost per helicopter of \$31,040.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States,

or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. Amend § 39.13 by adding the following new airworthiness directive (AD):

Agusta S.p.A Helicopters (Type Certificate Currently Held By AgustaWestland S.p.A.) (Agusta): Docket No. FAA-2014-0472; Directorate Identifier 2013-SW-040-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Applicability

This AD applies to Agusta Model A109E, A109K2, A119, and AW119 MKII helicopters with a main transmission part number (P/N) 109-0400-03-103, 109-0400-05-103, and 109-0400-03-109, with a Gleason crown P/N 109-0403-07-103 installed, certificated in any category.

(c) Unsafe Condition

This AD defines the unsafe condition as a crack in a Gleason crown. This condition could cause damage to or loss of the main rotor drive and subsequent loss of control of the helicopter.

(d) Compliance

Comply with this AD within the compliance times specified, unless already done.

(e) Required Actions

(1) For main transmissions with 2,400 or more hours time-in-service (TIS), within 200 hours TIS and thereafter at intervals not exceeding 1,600 hours TIS, magnetic particle inspect the Gleason crown, P/N 109-0403-07-103, for a crack by following the procedures in:

(i) Annex 1 of Agusta Bollettino Tecnico (BT) No. 109EP-128, Revision A, dated May 28, 2013, for Model A109E helicopters;

(ii) Annex 1 of Agusta BT No. 109K-57, Revision A, dated May 28, 2013, for Model A109K2 helicopters; or

(iii) Annex 1 of Agusta BT No. 119-058, Revision A, dated May 28, 2013, for Model A119 and AW119MKII helicopters.

(2) If there is a crack, before further flight, replace the Gleason crown assembly with a Gleason Crown assembly, P/N 109-0401-27-107. Replacing the Gleason crown assembly with P/N 109-0401-27-107 is terminating action for the inspection requirements of this AD.

(3) After the effective date of this AD, do not install a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109, on any helicopter.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (g) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(g) Related Information

(1) For more information about this AD, contact Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham

Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email
rao.edupuganti@faa.gov.

(2) For service information identified in this proposed AD, contact
AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate
Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39- 0331-664757; fax
39-0331-664680; or at <http://www.agustawestland.com/technical-bullettins>. You may
review the referenced service information at the FAA, Office of the Regional Counsel,
Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(3) The subject of this AD is addressed in European Aviation Safety Agency
(EASA) AD No. 2013-0118, dated June 3, 2013. You may view the EASA AD on the
Internet at <http://www.regulations.gov> in Docket No. FAA-2014-0472.

(h) Subject

Joint Aircraft System Component Code: 6320: Main Rotor Gearbox.

Issued in Fort Worth, Texas, on July 9, 2014.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-16683 Filed 07/15/2014 at 8:45 am; Publication Date: 07/16/2014]